

Date: Thursday, 1/17/2008 3:24:01 PM  
 User: Kim Johnston

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: HORIZONTAL TUBE
Job Number	: 36815		
Estimate Number	: 12313		
P.O. Number	:	Part Number	: D34737
This Issue	: 1/17/2008 S.O. No. :	Drawing Number	: D3473 UNDER REVIEW
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 1/1 Type : SMALL /MED FAB	Drawing Revision	: B
Previous Run	: 34421	Material	:
Written By	:	Due Date	: 2/10/2008 Qty: 10 Um: Each
Checked & Approved By	: <u>08 01 18</u>		
Comment	: Est Rev: A New Issue 06-03-02 JLM		
	: Est Rev: B As per Rev B 06-05-24 JLM		

OK per Rev. B  
 with MAILUPS  
 08.01.18  
 12

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M304S26GA 304/316 0.018 SHEET



8



Comment: Qty.: 0.6305 sf(s)/Unit Total : 6.3053 sf(s)

304/316 0.018 SHEET

Batch: 105591 B 8-1-23

2.0 WATER JET 105591 FLOW WATER JET



Comment: FLOW WATER JET

Cut as per Dwg D3473

Dwg Rev: B

Prog Rev: B

B 8-1-23



3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



B 8-1-23



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

08/01/05 (+12)

5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Deburr if necessary.

B 8-1-23

2-Roll & Bead as per Dwg D3473

ME

08.02.04

3-Spot weld as per Dwg D3473

ME

08-02-04

12

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: D Date: 08/02/04  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 1/17/2008 3:24:01 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: HORIZONTAL TUBE

Job Number: 36815

Part Number: D34737

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC11

VISUAL INSPECTION OF SPOT WELDING



Comment: VISUAL INSPECTION OF SPOT WELDING

SB 08/02/04

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 08/02/04 (12)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: GA

MF 08-02-04

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/02/04 (12)

Job Completion



min 2008/2/04 (12)

U

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

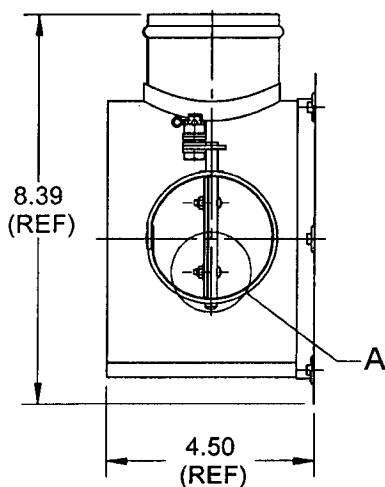
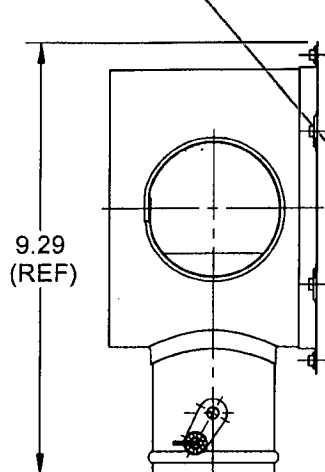
NOTE: Date & initial all entries





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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3473</b>	REV. B SHEET 1 OF 7
DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4
A	06.02.07	NEW ISSUE	
B	06.05.16	D3473-5F/-7F: 9.750 & 8.810 WERE 9.60 & 8.60	

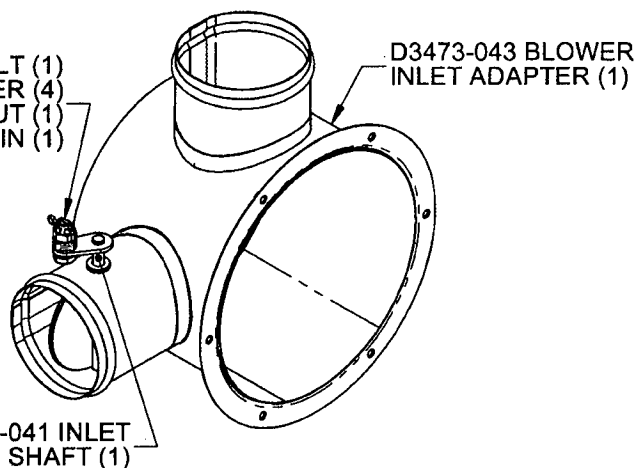
RELEASED  
06-05-16



D3470-9 BOLT (1)  
AN960-416 WASHER (4)  
AN310-4 NUT (1)  
MS24665-153 COTTER PIN (1)

UNDER REVIEW

02.04.02  
Dirt & Manufacturing  
Changes



DETAIL A  
SCALE 1:1

### D3473-041 BLOWER INLET ADAPTER

#### NOTES:

- 1) IDENTIFY WITH DART P/N D3473-041 USING FINE POINT PERMANENT INK MARKER
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-041	BLOWER INLET ADAPTER
1	D3470-9	BOLT
1	D3471-043	BLOWER INLET WELDMENT
1	D3474-041	INLET VALVE SHAFT
2	D3474-5	BUTTERFLY VALVE
1	D3474-7	BUTTERFLY VALVE SEAL
1	AN310-4	NUT
2	AN960-4L	WASHER
4	AN960-416	WASHER
1	MS24665-153	COTTER PIN
2	MS35206-217	SCREW
2	NAS679-A04	NUT

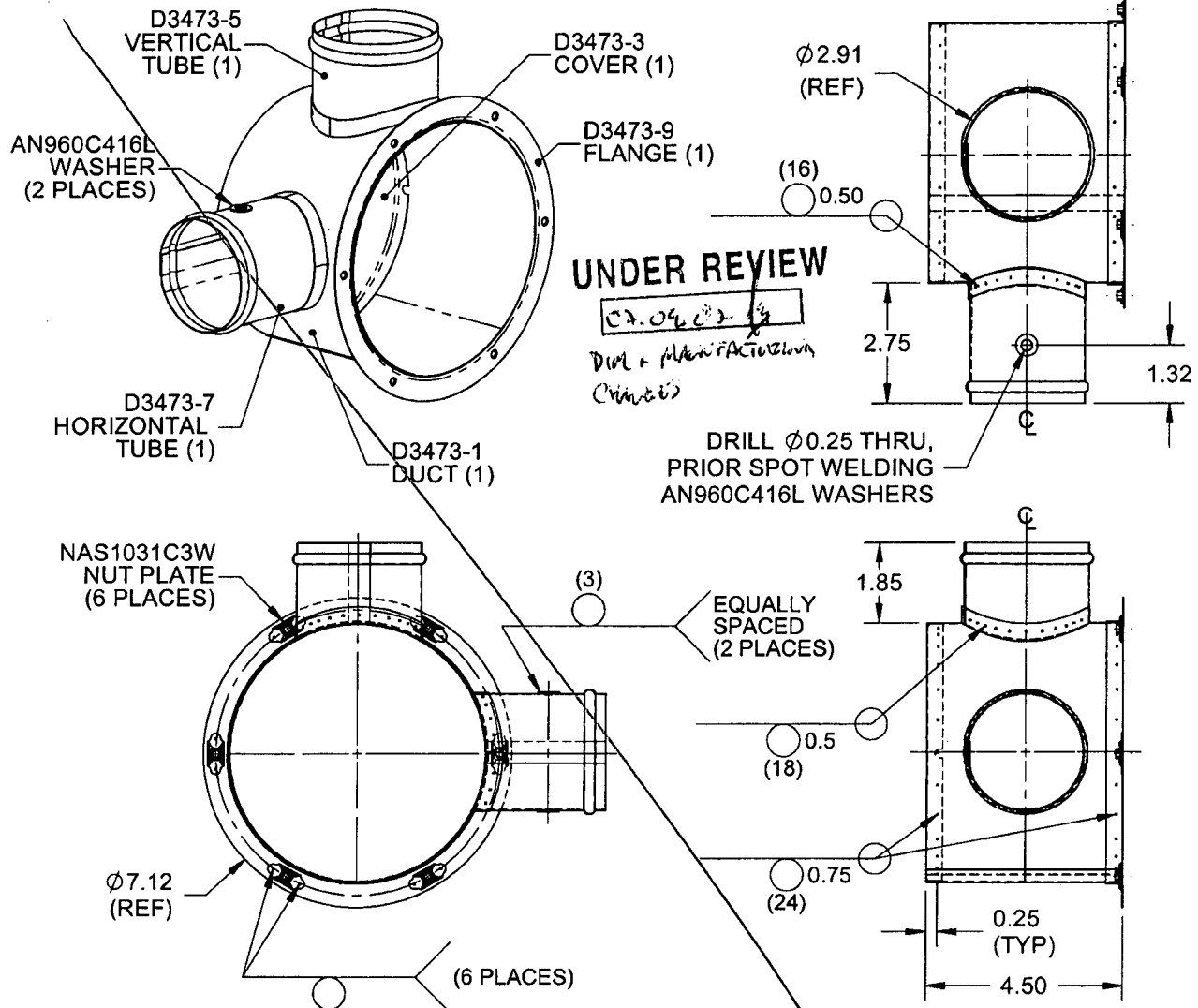
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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:4

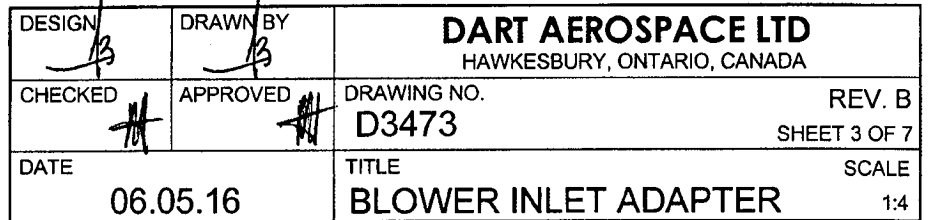
**RELEASED**  
06.05.16**D3473-043 BLOWER INLET WELDMENT****NOTES:**

- 1) SPOT WELD PER DART QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

QTY -041	P/N	DESCRIPTION
X	D3473-043	BLOWER INLET WELDMENT
1	D3473-1	DUCT
1	D3473-3	COVER
1	D3473-5	VERTICAL TUBE
1	D3473-7	HORIZONTAL TUBE
1	D3473-9	FLANGE
2	AN960C416L	WASHER
6	NAS1031C3W	NUT PLATE

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RELEASED  
06-05-16

UNDER REVIEW  
CA. 04.02.12  
DIA. & MANUFACTURING  
CRITERIA

D3473-1 DUCT

Technical drawing of a duct assembly, labeled D3473-1 DUCT. The drawing includes three views: a front view (top left), a side view (bottom left), and a top view (right). The front view shows a rectangular duct with a circular opening. Dimensions include 2.930 (I.D.), 0.38, 2.680 (I.D.), 4.50 (REF), and 0.25. The side view shows a similar duct with a circular opening. Dimensions include 0.38, 2.680 (I.D.), 4.50 (REF), and 0.25. The top view shows a circular duct with a circular opening. Dimensions include 6.33, 6.35, 22.5°, 0.50, and ALIGNMENT OF WELD SEAM. The drawing also includes a detail view of a circular feature with a diameter of 0.50 and a quantity of 9. The bottom view shows a rectangular duct with two circular openings. Dimensions include 19.220, 3.808, 4.600, 1.930 (MINOR DIA.), 2.250, 2.341 (MINOR DIA.), 2.040 (MAJOR DIA.), 2.416 (MAJOR DIA.), and 4.500. The drawing is marked with a diagonal line and the word 'SHOP'.

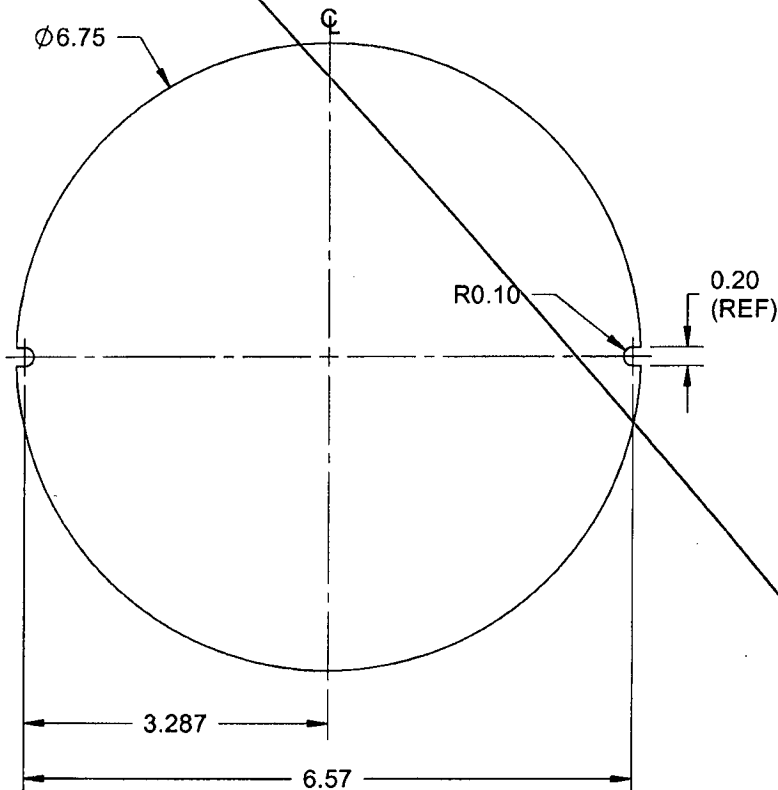
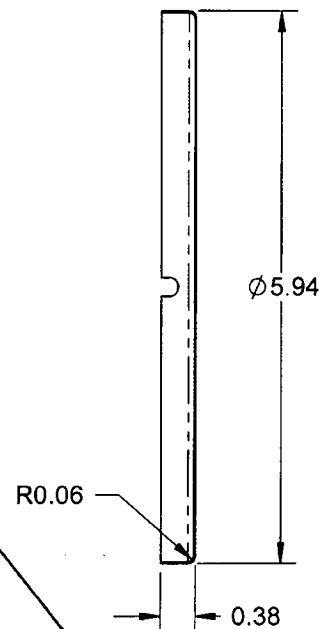
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DATE <b>06.05.16</b>		TITLE <b>BLOWER INLET ADAPTER</b>	SCALE 1:2

**RELEASED**  
06-05-16 *[Signature]***UNDER REVIEW***[Signature]*  
Dirt + Manufacturing  
Changes**D3473-3F COVER FLAT PATTERN****D3473-3 COVER****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK)
- 2) PART IS SYMMETRICAL ABOUT CENTERLINE
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010

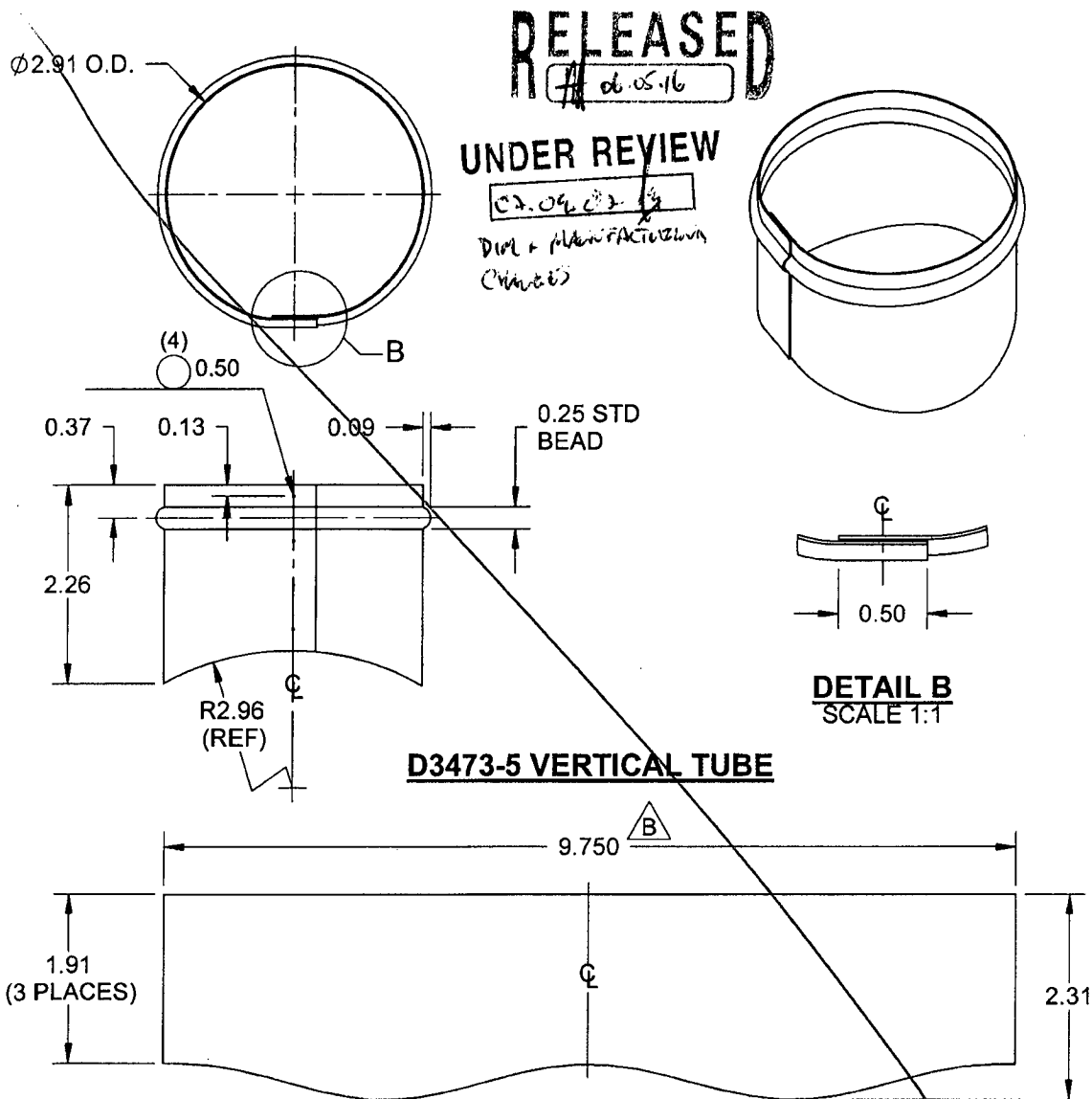
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DATE 06.05.16		TITLE BLOWER INLET ADAPTER	SCALE 1:2

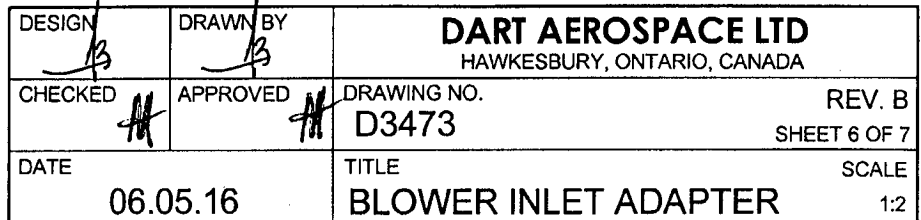
**NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)
- 2) SPOT WELD PER DART QSI 004
- 3) FINISH: NONE
- 4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) BREAK ALL SHARP EDGES 0.005 TO 0.010

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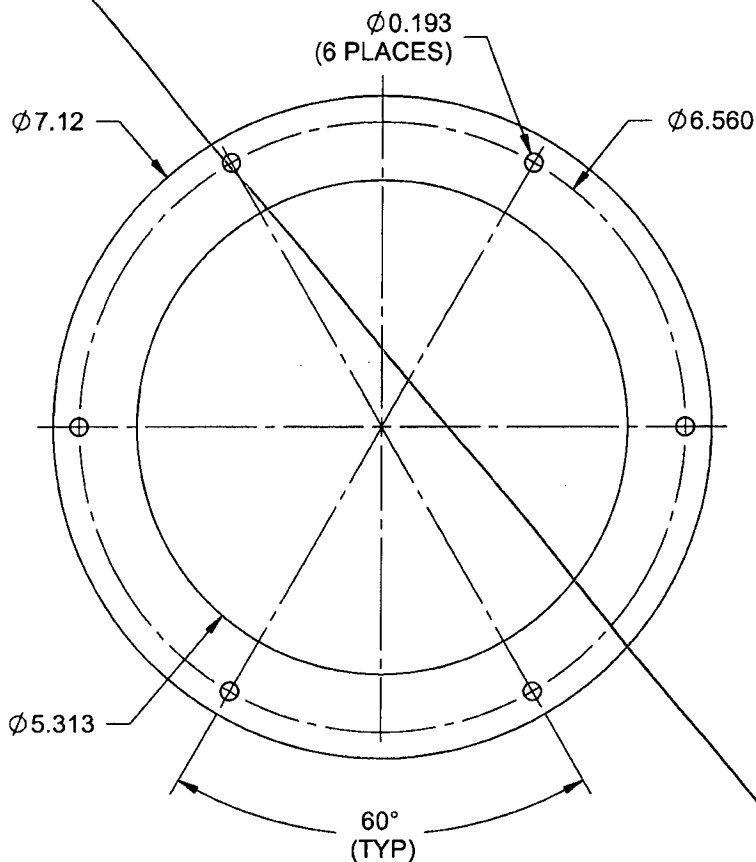
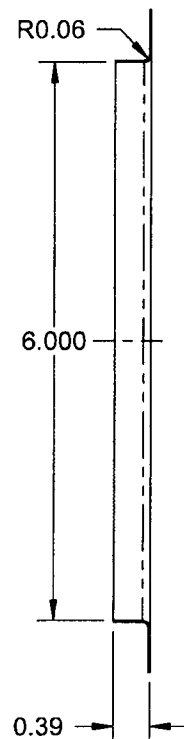
1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK)  
2) SPOT WELD PER DART QSI 004  
3) FINISH: NONE  
4) FLAT PATTERN IS SYMMETRICAL ABOUT CENTERLINE  
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED  
6) ALL DIMENSIONS ARE IN INCHES  
7) BREAK ALL SHARP EDGES 0.005 TO 0.010

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3473	REV. B SHEET 7 OF 7
DATE 06.05.16		TITLE BLOWER INLET ADAPTER SCALE 1:2	

**UNDER REVIEW***02.04.16**Dim + MANUFACTURING  
Changes***RELEASED**  
*06.05.16***D3473-9F FLANGE FLAT PATTERN****D3473-9 FLANGE  
BENDING DETAIL****NOTES:**

- 1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH  
26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010

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**SPOT WELD TEST RECORD**  
**AMS-W-6858A**  
**CLASS 'C'**

**TEST NO#:** 63

**EMPLOYEE:** Milene Faurey

**PART NUMBER:** D3473-7

**JOB NUMBER:** B36815

**MATERIAL TYPE:** 304L

**MATERIAL THICKNESS:** 0.078

**GROUP SPECIFICATION**

☐

Group 1: Aluminum & magnesium

☐

Group 2: Iron; nickel; cobalt

☒

Group 3: Titanium SS

**TEST RESULTS**

	PASS	FAIL	
VISUAL:	[ <u>  /  </u> ]	[    ] ]	
PENETRATION:	[ <u>  /  </u> ]	[    ] ]	
PULL STRENGTH:	[ <u>  /  </u> ]	[    ] ]	PSI Reading: _____

Qualified in accordance with standard AMS-W-6858A and QSI 004 (ref: 4.3)

**DATE OF TEST COUPON:** 08/02/04  
**QUALIFIER:** SB